## **EAST Search History**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	21446	anthracene	US-PGPUB; USPAT	OR	ON	2006/08/14 15:39
L2	9629	anthracene and synthesis	US-PGPUB; USPAT	OR	ON	2006/08/14 15:39
L3	9287	anthracene and making	US-PGPUB; USPAT	OR	ON	2006/08/14 15:39
L4	11283	anthracene and make	US-PGPUB; USPAT	OR	ON	2006/08/14 15:39
L5	673162	anthracene and ammonium salt	US-PGPUB; USPAT	OR	ON	2006/08/14 15:40
L6	8525	anthracene and ammonium and salt	US-PGPUB; USPAT	OR	ON	2006/08/14 15:40
L7	4223	anthracene and ammonium and salt and making	US-PGPUB; USPAT	OR	ON	2006/08/14 15:40
L8	464	I7 and alkylating	US-PGPUB; USPAT	OR	ON	2006/08/14 15:40
L9	410	I7 and alkylating and ether	US-PGPUB; USPAT	OR	ON	2006/08/14 15:40
L10	76	I7 and alkylating and ether and phosphonium	US-PGPUB; USPAT	OR	ON	2006/08/14 15:41
L11	0	anthracenediol and I10	US-PGPUB; USPAT	OR	ON	2006/08/14 15:42
L12	36	anthracenediol	US-PGPUB; USPAT	OR	ON	2006/08/14 15:42
L13	0	l10 and l12	US-PGPUB; USPAT	OR	ON	2006/08/14 15:42
L14	671835	112 and ammonium salt	US-PGPUB; USPAT	OR	ON	2006/08/14 15:42
L15	6	l12 and ammonium ADJ salt	US-PGPUB; USPAT	OR	ON	2006/08/14 15:43
·S1	1	"6696112".pn.	US-PGPUB; USPAT	OR	ON	2006/08/14 12:06
S2	5	"539807".ap.	US-PGPUB; USPAT	OR	ON	2006/08/14 15:38

## 10/539,807 8-14-2006 Yung Chu

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID: ssptaylc1626

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

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                 "Ask CAS" for self-help around the clock-
NEWS
      2
NEWS
         FEB 27 New STN AnaVist pricing effective March 1, 2006
                STN AnaVist $500 visualization usage credit offered
        APR 04
NEWS
        MAY 10 CA/CAplus enhanced with 1900-1906 U.S. patent records
NEWS
                KOREAPAT updates resume
NEWS
      6 MAY 11
                Derwent World Patents Index to be reloaded and enhanced
NEWS
      7
        MAY 19
NEWS
      8
        MAY 30
                IPC 8 Rolled-up Core codes added to CA/CAplus and
                 USPATFULL/USPAT2
                 The F-Term thesaurus is now available in CA/CAplus
NEWS 9
        MAY 30
                 The first reclassification of IPC codes now complete in
NEWS 10
         JUN 02
                 INPADOC
NEWS 11
         JUN 26
                 TULSA/TULSA2 reloaded and enhanced with new search and
                 and display fields
                Price changes in full-text patent databases EPFULL and PCTFULL
NEWS 12
         JUN 28
NEWS 13
         JUl 11
                CHEMSAFE reloaded and enhanced
         JUl 14
                FSTA enhanced with Japanese patents
NEWS 14
                Coverage of Research Disclosure reinstated in DWPI
NEWS 15 JUL 19
NEWS 16 AUG 09
                 INSPEC enhanced with 1898-1968 archive
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NEWS EXPRESS JUNE 30 CURRENT WINDOWS VERSION IS V8.01b, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 26 JUNE 2006.

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NEWS IPC8 For general information regarding STN implementation of IPC 8
NEWS X25 X.25 communication option no longer available

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SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

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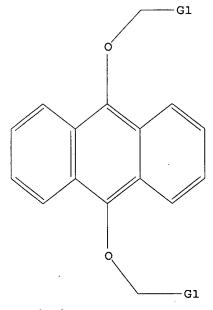
REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> Uploading C:\Documents and Settings\ychu\Desktop\Case\10539807\10539807.str

L1 STRUCTURE UPLOADED

=> d L1 HAS NO ANSWERS L1 S'



G1 Ak,Cb

Structure attributes must be viewed using STN Express query preparation.

=> s 11 SAMPLE SEARCH INITIATED 08:29:15 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED :-

100.0% PROCESSED 739 ITERATIONS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 13150 TO 16410 800

PROJECTED ANSWERS: 200 TO

25 SEA SSS SAM L1 L2

=> s l1 full

FULL SEARCH INITIATED 08:29:37 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED -15657 TO ITERATE

100.0% PROCESSED 15657 ITERATIONS 454 ANSWERS

SEARCH TIME: 00.00.01

L3 454 SEA SSS FUL L1

=> file caplus

SINCE FILE COST IN U.S. DOLLARS TOTAL

> ENTRY SESSION

25 ANSWERS

FULL ESTIMATED COST 167.38 167.59

FILE 'CAPLUS' ENTERED AT 08:30:07 ON 14 AUG 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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http://www.cas.org/infopolicy.html

=> s 13

L4366 L3

=> s 14 and quaternary ammonium

127577 QUATERNARY

339 QUATERNARIES

127720 QUATERNARY

(QUATERNARY OR QUATERNARIES)

370638 AMMONIUM

402 AMMONIUMS

370782 AMMONIUM

(AMMONIUM OR AMMONIUMS)

63227 QUATERNARY AMMONIUM

(QUATERNARY (W) AMMONIUM)

=> d ibib abs hitstr tot

ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN  $L_5$ 

ACCESSION NUMBER:

2003:271685 CAPLUS

DOCUMENT NUMBER:

TITLE:

Preparation of hydroquinone alkyl ethers — Not OP Seme

INVENTOR(S): PATENT ASSIGNEE(S): Kubo, Hideo; Yamaguchi, Katsuji; Shirai, Akihiro

SOURCE:

Nippon Soda Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

later than 12/19/2002.

KIND PATENT NO. *(----*----JP 2003104926 A2 PRIORITY APPLN \_\_INFO .:

DATE -----20030409 APPLICATION NO. \_\_\_\_\_\_ JP 2001-299629

DATE 20010928

JP 2001-299629

not 102(e) 20010928

OTHER SOURCE(S):

CASREACT 138:287414

Title compds., useful as sensitizers for photopolymn., etc. (no data), are because Non AB prepd. by alkylation of hydroquinones by C.gtoreq.3 alkylating agents in us filiz the presence of bases and quaternary ammonium salts

having C-gtoreq.5 substituents on N. Anthraquinone was alkylated by BuI In THF/H2O in the presence of trioctylmethylammonium chloride, Na2S2O4, and NaOH at 40-50.degree. for 5 h to give 85% 9,10-dibutoxyanthracene.

IT 76275-14-4P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP

(prepn. of hydroquinone alkyl ethers from hydroquinones using quaternary ammonium salts)

RN 76275-14-4 CAPLUS

CN Anthracene, 9,10-dibutoxy- (9CI) (CA INDEX NAME)

Current apprention

CAPLUS COPYRIGHT 2006 ACS on STN ANSWER 2 OF 3

ACCESSION NUMBER:

2003:271684 CAPLUS

DOCUMENT NUMBER:

138:287413

TITLE:

Preparation of anthracene diethers

INVENTOR(S):

Nakano, Hironori; Honda, Hiroyuki; Numata, Shigeaki

PATENT ASSIGNEE(S): Kawasaki Kasei Chemicals, Ltd., Japan Jpn. Kokai Tokkyo Koho, 7 pp.

SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

1

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003104925	A2	20030409	JP 2001-299128	20010928

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CA 2510270
                          AA
                                20040708
                                             CA 2002-2510270
                                                                    20021219
     WO 2004056734
                          A1
                                20040708
                                            WO 2002-JP13314
                                                                    20021219
     WO 2004056734
                          C1
                                20050804
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT,
             RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG,
             US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SI, SK, TR, BF, BJ, CF,
             CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2002357616
                                20040714
                                            AU 2002-357616
                                                                    20021219
                          A1
     EP 1574493
                          A1
                                20050914
                                            EP 2002-808287
                                                                    20021219
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
     US 2006079721
                          Al
                                20060413
                                             US 2005-539807
                                                                    20050620
                                             JP 2001-299128
                                                                 A 20010928
PRIORITY APPLN. INFO.:
                                             WO 2002-JP13314
                                                                 W
                                                                    20021219
                         MARPAT 138:287413
OTHER SOURCE(S):
```

GI

Anthracene diethers I (R = alkyl, allyl, aryl, benzyl, hydroxyalkyl, AB alkoxyalkyl; R5, R6 = inert group; m, n = 0-4), useful as sensitizers for photocurable compns. (no data), are prepd. by reaction of 9,10-anthracenediols with etherifying agents in aq. media contg. alkalies and quaternary ammonium or phosphonium compds. 9,10-Anthracenediol Na salt was etherified with BuBr in H2O/MEK in the presence of Bu4NBr at 70.degree. for 4 h to give 90% 9,10dibutoxyanthracene.

68818-86-0P, 9,10-Diethoxyanthracene 76275-14-4P IT 479412-73-2P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(prepn. of anthracene diethers from anthracenediols using quaternary ammonium or phosphonium compds.)

RN68818-86-0 CAPLUS

(CA INDEX NAME) CN Anthracene, 9,10-diethoxy- (6CI, 9CI)

Ι

RN

OBu-n

RN 479412-73-2 CAPLUS

CN Anthracene, 9,10-dipropoxy- (9CI) (CA INDEX NAME)

OPr-n OPr-n

for allowane elose composition

ANSWER 3 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN

1987:59428 CAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER:

106:59428

TITLE:

Liquid crystal compositions

INVENTOR(S):

Horimoto, Hikari; Mizutani, Yukio; Ogata, Takayuki

PATENT ASSIGNEE(S):

Tokuyama Soda Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 13 pp.

SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

KIND PATENT NO. DATE DATE ---------------19860624 1984-257349 A2 JP 61136584 19841207 JP 03080833 B4 19911226

PRIORITY APPLN. INFO.:

JP 1984-257349 19841207

The claimed liq. crystal-like compns. contain (1) a quaternary ammonium compd. having .gtoreq.2 linear hydrophobic groups or .gtoreq.1 hydrophobic growp contg. stiff part within the chain and (2) a phosphoric group-contg/compd. having .gtoreq.2 linear hydrophobic groups. The liq. crystal-like compns. give membranes which show good water resistance and lig. crystal characteristics. The compns. are useful in prepg. synthetic biomembranes, display devices, and membranes for various sensors. Thus, a di(n-octadecyl)dimethylammonium bromide soln. and a di(n-dodecy/) monohydrogen phosphate soln. were mixed to give white ppt. which showed small soly. in water and showed liq. crystal phase at 56-115.

IT 106347-17-5

RL: PRP (Properties)

(prepns. of, as liq. crystal compds.)

106347-17-5 CAPLUS RN

1-Decanaminium, 10-[[10-(dodecyloxy)-9-anthracenyl]oxy]-N,N,N-trimethyl-, CN dioctadecyl phosphate (9CI) (CA INDEX NAME)

CM 1 CRN 106347-16-4 CMF C39 H62 N O2

CM 2

CRN 84841-00-9 CMF C36 H74 O4 P

Me- 
$$(CH_2)_{17}$$
-O-  $P$ -O-  $(CH_2)_{17}$ -Me

=> s 14 and quaternary phosphonium

127577 QUATERNARY

339 QUATERNARIES

127720 QUATERNARY

(QUATERNARY OR QUATERNARIES)

15919 PHOSPHONIUM

80 PHOSPHONIUMS

15942 PHOSPHONIUM

(PHOSPHONIUM OR PHOSPHONIUMS)

1216 QUATERNARY PHOSPHONIUM

(QUATERNARY (W) PHOSPHONIUM)

0 L4 AND QUATERNARY PHOSPHONIUM

=> s 14 and phase transfer

1690902 PHASE

353345 PHASES

1839674 PHASE

(PHASE OR PHASES)

781065 TRANSFER

25566 TRANSFERS

793479 TRANSFER

(TRANSFER OR TRANSFERS)

14182 PHASE TRANSFER

(PHASE (W) TRANSFER)

L7 1 L4 AND PHASE TRANSFER

=> d ibib abs hitstr tot

L7 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2003:271685 CAPLUS

DOCUMENT NUMBER:

138:287414

TITLE:

L6

Preparation of hydroquinone alkyl ethers

INVENTOR(S):

Kubo, Hideo; Yamaguchi, Katsuji; Shirai, Akihiro

PATENT ASSIGNEE(S):

Nippon Soda Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

Japanese

1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

deplicati /3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003104926	A2	20030409	JP 2001-299629	20010928
PRIORITY APPLN. INFO.:			JP 2001-299629	20010928

OTHER SOURCE(S):

CASREACT 138:287414

Title compds., useful as sensitizers for photopolymn., etc. (no data), are prepd. by alkylation of hydroquinones by C.gtoreq.3 alkylating agents in the presence of bases and quaternary ammonium salts having C.gtoreq.5 substituents on N. Anthraquinone was alkylated by BuI in THF/H2O in the presence of trioctylmethylammonium chloride, Na2S2O4, and NaOH at 40-50.degree. for 5 h to give 85% 9,10-dibutoxyanthracene.

IT 76275-14-4P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(prepn. of hydroquinone alkyl ethers from hydroquinones using quaternary ammonium salts)

RN 76275-14-4 CAPLUS

CN Anthracene, 9,10-dibutoxy- (9CI) (CA INDEX NAME)

L8

=> s 14 and quaternary salt

127577 QUATERNARY

339 QUATERNARIES

127720 QUATERNARY

(QUATERNARY OR QUATERNARIES)

771808 SALT

597517 SALTS

1148926 SALT

(SALT OR SALTS)

6851 QUATERNARY SALT

(QUATERNARY (W) SALT)

0 L4 AND QUATERNARY SALT

=> s 14 and etherifying agent

1025 ETHERIFYING

793909 AGENT

1154928 AGENTS

1624410 AGENT

(AGENT OR AGENTS)

316 ETHERIFYING AGENT

(ETHERIFYING (W) AGENT)

L9 1 L4 AND ETHERIFYING AGENT

=> d ibib abs hitstr tot

L9 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:271684 CAPLUS

DOCUMENT NUMBER: 138:287413

TITLE: Preparation of anthracene diethers

INVENTOR(S): Nakano, Hironori; Honda, Hiroyuki; Numata, Shigeaki

PATENT ASSIGNEE(S): Kawasaki Kasei Chemicals, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

Current application

PA	CENT !	NO.			KINI	)	DATE			APPI	LICAT	ION I	NO .		D.	ATE	
JP	2003	1049	25		A2		2003	0409		JP 2	2001-:	2991:	28		2	0010	928
	2510				AA		2004	0708		CA 2	2002-	2510:	270		2	0021	219
WO	2004	0567	34		A1		2004	0708		WO 2	2002-	JP13	314		2	0021	219
WO	2004	0567	34		C1		2005	0804									
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	KE,	KG,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,
		LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	PL,	PT,
		RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,	UΑ,	ŪĠ,
		US,	UΖ,	VC,	VN,	ΥU,	ZA,	ZM,	zw								
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
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EP	1574	493			A1		2005	0914		EP 2	2002-	8082	87		2	0021	219
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	SK		
US	2006	0797	21		A1		2006	0413		US 2	2005-	5398	07		2	0050	620
PRIORIT	Y APP	LN.	INFO	. :						JP 2	2001-	2991	28		A 2	0010	928
										WO 2	2002-	JP13	314	1	₩ 2	0021	219
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OTHER SOURCE(S): MARPAT 138:287413

$$R^{5}m$$
  $R^{6}n$ 

AB Anthracene diethers I (R = alkyl, allyl, aryl, benzyl, hydroxyalkyl, alkoxyalkyl; R5, R6 = inert group; m, n = 0-4), useful as sensitizers for photocurable compns. (no data), are prepd. by reaction of 9,10-anthracenediols with etherifying agents in aq. media contg. alkalies and quaternary ammonium or phosphonium compds. 9,10-Anthracenediol Na salt was etherified with BuBr in H2O/MEK in the presence of Bu4NBr at 70.degree. for 4 h to give 90% 9,10-dibutoxyanthracene.

TT 68818-86-0P, 9,10-Diethoxyanthracene 76275-14-4P 479412-73-2P

I

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(prepn. of anthracene diethers from anthracenediols using quaternary ammonium or phosphonium compds.)

RN 68818-86-0 CAPLUS

CN Anthracene, 9,10-diethoxy- (6CI, 9CI) (CA INDEX NAME)

RN 76275-14-4 CAPLUS

CN Anthracene, 9,10-dibutoxy- (9CI) (CA INDEX NAME)

RN 479412-73-2 CAPLUS

CN Anthracene, 9,10-dipropoxy- (9CI) (CA INDEX NAME)

=> s 14 and phosphonium

15919 PHOSPHONIUM

80 PHOSPHONIUMS

15942 PHOSPHONIUM

(PHOSPHONIUM OR PHOSPHONIUMS)

L10 3 L4 AND PHOSPHONIUM

=> d ibib abs hitstr tot

L10 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2005:116518 CAPLUS

DOCUMENT NUMBER:

142:200135

TITLE:

UV-curable coating compositions for food or soft drink

cans or bottles and their coated products

INVENTOR(S):

Nakajima, Yoshimoto

PATENT ASSIGNEE(S): SOURCE:

Toyo Ink Mfg. Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 28 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

late, not opp

DATE PATENT NO. KIND DATE APPLICATION NO \_\_\_\_\_\_ \_\_\_\_\_ -----JP 2003-276500 JP 2003-276500 · JP 2005036152 20030718 A2 20050210 PRIORITY APPLN. INFO.: 20030718

OTHER SOURCE(S):

MARPAT 142:200135

Title compns. contain (A) photo cationic polymn. initiators selected from iodonium, sulfonium, sulfoxonium, and/or phosphonium salts, (B) 9,10-dialkoxyanthracenes (with C1-8 alkoxy groups substituted at 9 and 10 positions and C1-4 alkyl-substituted or unsubstituted 1-4 and 5-8 positions) as photo sensitizers, (C) room temp. solid epoxy compds. (contg. Me-substituted phenol, epichlorohydrin, and HCHO units), (D) alicyclic epoxy group-contg. cationic polymn. compds., and (E) pigments at A/(A + B + C + D + E) of 1.5-4.0% and C/(A + B + C + D + E) of 1-10%, and preferably E/(A + B + C + D + E) of .gtoreq.40% for TiO2 and .gtoreq.10% for Al pigment. A Sn-plated steel and PET laminate was coated with a white compn. contg. Cyracure UVI 6990 3, 9,10-dibutoxyanthracene 0.3, YDCN 704 5, Cyracure UVR 6110 41.70, and TiO2 50 parts and UV-cured at 40-70% relative humidity over 10-30 s to form a hard film with excellent

76275-14/4 IT

adhesion.

RL: CAX (Catalyst use); USES (Uses)

(ghotosensitizer; UV-curable alicyclic epoxy coatings contg. onium Kationic initiators and anthracene photo sensitizers for food cans or bottles)

RN76275-14-4 CAPLUS

Anthracene, 9,10-dibutoxy- (9CI) (CA INDEX NAME) CN

L10 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2003:271684 CAPLUS

DOCUMENT NUMBER:

138:287413

TITLE:

Preparation of anthracene diethers

INVENTOR(S):

Nakano, Hironori; Honda, Hiroyuki; Numata, Shigeaki

duplicate

Kawasaki Kasei Chemicals, Ltd., Japan

PATENT ASSIGNEE(S): SOURCE:

Jpn. Kokai Tokkyo Koho, 7 pp. CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. DATE APPLICATION NO. DATE KIND \_ \_ \_ \_ \_ \_ \_ \_\_\_\_\_\_ 20030409 20010928 JP 2003104925 A2 JP 2001-299128 AACA 2510270 20040708 CA 2002-2510270 20021219 A1 20040708 WO 2002-JP13314 20021219 WO 2004056734

20050804 C1/ WO 2004056734

> AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, W: AE, AG, AL,

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CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT,
             RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG,
             US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SI, SK, TR, BF, BJ, CF,
             CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                 20040714
                                            AU 2002-357616
                                                                    20021219
     AU 2002357616
                          A1
                                20050914
     EP 1574493
                          A1
                                             EP 2002-808287
                                                                    20021219
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     US 2006079721
                                 20060413
                                             US 2005-539807
                                                                    20050620
                          A1
PRIORITY APPLN. INFO.:
                                             JP 2001-299128
                                                                 Α
                                                                    20010928
                                             WO 2002-JP13314
                                                                    20021219
                                                                 W
                         MARPAT 138:287413
GI
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OTHER SOURCE(S):

$$R^5m$$
  $R^6n$ 

OR

Anthracene diethers I (R = alkyl, allyl, aryl, benzyl, hydroxyalkyl, AB alkoxyalkyl; R5, R6 = inert group; m, n = 0-4), useful as sensitizers for photocurable compns: (no data), are prepd. by reaction of 9,10-anthracenediols with etherifying agents in aq. media contg. alkalies and quaternary ammonium or phosphonium compds. 9,10-Anthracenediol Na salt was etherified with BuBr in H2O/MEK in the presence of Bu4NBr at 70.degree. for 4 h to give 90% 9,10dibutoxyanthracene.

TT 68818-86-0P, 9,10-Diethoxyanthracene 76275-14-4P 479412-73-2P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(prepn. of anthracene diethers from anthracenediols using quaternary ammonium or phosphonium compds.)

RN 68818-86-0 CAPLUS

Anthracene, 9,10-diethoxy- (6CI, 9CI) (CA INDEX NAME) CN

I

76275-14-4 CAPLUS RN

CN Anthracene, 9,10-dibutoxy- (9CI) (CA INDEX NAME)

RN 479412-73-2 CAPLUS

CN Anthracene, 9,10-dipropoxy- (9CI) (CA INDEX NAME)

L10 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2000:503506 CAPLUS

DOCUMENT NUMBER:

133:136808

TITLE:

SOURCE:

Radiation-curable compositions and manufacture of

coatings therefrom

INVENTOR (S):

Maruyama, Tsutomu

PATENT ASSIGNEE(S):

Kansai Paint Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

LANGUAGE:

Patent Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.

KIND DATE APPLICATION NO.

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20000725

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------JP 1999-8726

19990118

19990118

JP 2000204284 Α2 PRIORITY APPLN. INFO.:

JP 1999-8726

OTHER SOURCE(S):

MARPAT 133:136808

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I

GI

AB The compns. contain (A) photosensitizers I (R1, R2 = C1-8-alkyl; R3 = H, C1-4-alkyl) 0.01-5, (B) photo-cation initiators selected from iodonium salts, sulfonium salts, and phosphonium salts 0.1-20, and (C) cationically photopolymerizable compds. 100 parts. Thus, a compn. contg. 9,10-diethoxyanthracene 1, bis(4-tert-butylphenyl)iodonium hexafluorophosphate (BBI 102) 1, and 3,4-epoxycyclohexylmethyl

3,4-epoxycyclohexanecarboxylate (UVR 6110) 100 parts was applied on a substrate and radiation-cured to give a coating, showing spectral sensitivity 205-450 nm, gel fraction 87%, and pencil hardness 3-4 H. 68818-86-0, 9,10-Diethoxyanthracene 76275-14-4

205515-07-7, 2-Ethyl-9,10-diethoxyanthracene 205515-11-3

, 2-Methyl-9,10-diethoxyanthracene

RL: CAT (Catalyst use); USES (Uses)

(photosensitizer; radiation-curable coating compns. with good curability and hardness)

RN 68818-86-0 CAPLUS

CN Anthracene, 9,10-diethoxy- (6CI, 9CI) (CA INDEX NAME)

IT

RN 76275-14-4 CAPLUS

CN Anthracene, 9,10-dibutoxy- (9CI) (CA INDEX NAME)

RN 205515-07-7 CAPLUS

CN Anthracene, 9,10 diethoxy-2-ethyl- (9CI) (CA INDEX NAME)

RN 205515-11-3 CAPLUS

CN Anthracene, 9,10-diethoxy-2-methyl- (9CI) (CA INDEX NAME)

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=> s 14 and amonium salt
            10 AMONIUM
        771808 SALT
        597517 SALTS
       1148926 SALT
                 (SALT OR SALTS)
             2 AMONIUM SALT
                 (AMONIUM(W)SALT)
L11
             0 L4 AND AMONIUM SALT
=> s 14 and ammonium
        370638 AMMONIUM
           402 AMMONIUMS
        370782 AMMONIUM
                 (AMMONIUM OR AMMONIUMS)
             9 L4 AND AMMONIUM
L12
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L12 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2005:1310229 CAPLUS
DOCUMENT NUMBER:
                         144:57628
                         Photocurable dental composition
TITLE:
                         Frances, Jean-Marc
INVENTOR(S):
PATENT ASSIGNEE(S):
                         Fr.
SOURCE:
                         U.S. Pat. Appl. Publ., 30 pp.
                         CODEN: USXXCO
DOCUMENT TYPE:
                         Patent
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
                         1
PATENT INFORMATION:
                                            APPLICATION NO.
     PATENT NO.
                         KIND
                                DATE
                                                                   DATE
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                                                                   _____
     ______
                                20051215
                                           US 2005-125133
                         A1
     US 2005277705
                                                                   20050510
                        A1 20060106
A1 20051222
                                            FR/2004-7210
     FR 2872409
                                                                   20040630
            120439 A1 20051222 WO 2005-FR1049 20050428
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
    WO 2005120439
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             LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
             NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,
             SM, SY, TJ, TM, PŃ, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,
             ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
PRIORITY APPLN / INFO.:
                                            FR 2004-5176
                                                                A 20040513
                                                                A 20040630
                                            FR 2004-7210
                                            US 2004-599021P
                                                               P 20040806
OTHER SOURCE(S):
                         MARPAT 144:57628
     Dental compns. are described which are photocurable by radiation with a
     wavelength greater than 390 nm. The compns. include a cationically active
     compd., a dental filler, optionally a dispersant, a cationic
     photoinitiator and a photosensitizer which is a thioxanthone salt
     substituted by at least one group contg. an ammonium function.
     The compn. has the advantage of remedying the color stability problems of
     finished dental products after crosslinking. For example, dental
     composites comprising photosensitizer based on thioxanthones contg.
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ammonium functionality, gave rise to an increased coloring

stability. An initial pink color change was obsd. with the comparative compn. comprising photosensitizer based on chloropropoxythioxanthone (CPTX), even at a low level of 60 ppm, which attenuates over time but which was still measurable after 5 days. In contrast, the use of thioxanthones contg. ammonium functionality, did not give rise to this coloration defect at a low level and, surprisingly, made it possible to preserve a greater color stability.

IT. 76275-14-4, 9,10-Dibutoxyanthracene

RL: CAT (Catalyst use); USES (Uses)

(PS-39; photocurable dental compn. comprising thioxanthone photosensitizer with increased color stability)

RN 76275-14-4 CAPLUS

Anthracene, 9,10-dibutoxy- (9CI) (CA INDEX NAME) CN

CAPLUS COPYRIGHT 2006 ACS on STN L12 ANSWER 2 OF 9

ACCESSION NUMBER: 2004:118389 CAPLUS

DOCUMENT NUMBER:

140:147419

TITLE:

Positive-working photosensitive heat-resistant resin

10 late and not ODP

precursor compositions for semiconductor devices Yumiba, Tomoyuki; Suwa, Atsushi; Tomikawa, Masa🥦

INVENTOR(S):

PATENT ASSIGNEE(S):

SOURCE:

Toray Industries, Inc., Japan Jpn. Kokai Tokkyo Koho, 23 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

LANGUAGE:

Patent Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004045477 PRIORITY APPLN. INFO.:	A2	20040212	JP 2002-199583 JP 2002-199583	20020709

MARPAT 140; 147419 The compns. with improved adhesion to substrates after heat-curing for interlayer insulator films and surface protection films of semiconductor devices, contain (A) polymers having main units [COR1(OH)p(CO2R3)nCONHR2(OH)q(CO2R4)oNH]m(R1, R2 = 2-8 valent C.gtoreq.2)org. residue; R3, R4/= H, alkali metal ion, ammonium ion, C1-20 org. residue; m = 3 - 100,000; n, o = 0-2; p, q = 0-4; n + q > 0) and (B) compds. represented by R5R6C:N(CH2)a(SiR11R12O)bSiR13R14R15 or R7R8C:N(CH2)c  $\cancel{S}$ 1R16R170)dSiR18R19(CH2)eN:CR9R10 (R5-R10 = C.gtoreq.1 org.residue; R11-R19 = C1-6 hydrocarbyl, C1-6 alkoxy; at least one of R11-R15 and one of R16-R19 = C1-6 alkoxy). Thus, a varnish contg. polyamic acid [prepd. from 4,4'-diaminodiphenyl ether, 1,3-bis(3aminopropyl)tetramethyldisiloxane, pyromellitic anhydride, and 3,3',4,4'-benzophenonetetracarboxylic acid dianhydride] and 3-triethoxysilyl-N-(1,3-dimethylbutylidene)propylamine was applied on a Si wafer and heated to give a polyimide film showing high adhesion after pressure cooker test.

TT 119666-27-2

> RL: CAT (Catalyst use); USES (Uses) (photoacid generator; pos.-working photosensitive heat-resistant resin

precursor compns. contg. aminoalkoxysilanes for semiconductor device insulator and protection films)

RN 119666-27-2 CAPLUS

CN 2-Anthracenesulfonic acid, 9,10-diethoxy-, (4-nitrophenyl)methyl ester (9CI) (CA INDEX NAME)

L12 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2004:118071 CAPLUS

DOCUMENT NUMBER:

140:165070

TITLE:

Heat-resistant resin precursor compositions and

semiconductor devices therewith

INVENTOR (S):

Yumiba, Tomoyuki; Minamihashi, Katsuya; Tomikawa,

Masao

PATENT ASSIGNEE(S):

SOURCE:

Toray Industries, Inc., Japan

Jpn. Kokai Tokkyo Koho, 26

CODEN: JKXXAF

DOCUMENT TYPE:

LANGUAGE:

Patent Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

KIND APPLICATION NO DATE PATENT NO. DATE ----\_\_\_\_\_ \_\_\_\_\_ --**---**JP 2003-119531 A2 20040212 20030424 JP 2004043779 JP 2002-126061 A 20020426 PRIORITY APPLN. INFO.:

Title compns. comprise (A) polymers having repeating units

[COR1(OH)p(COOR3)nCONHR2(OH)q(COOR4)oNH)m as main components and (B) compds. (Z1)aR5(Z2)b, wherein R1, R2 = divalent-octavalent org. groups contg. .gtoreq.2 carbon atoms; R3, R4 = H, alkali metal ion, ammonium ion, or C1-20 org. group; R5 = structure contg. .gtoreq.2 carbon atoms; m = 3-100,000 integer; n, o = 0-2 integer; p, q = 0-4 integer (p + q > 0); Z1 = .gtoreq.1 structure selected from NR6R7, N:CR8R9, NR10C(:O)R11, or NHCOR12OH; Z2 = .gtoreq.1 structure selected from NR6R7, N:CR8R9, NR10C(:O)R11, NHCOR12OH, vinyl, ethenyl, mercapto, or hydroxy group; R6, R7, R8, R9, R10 = H or C1-8 org. group; R11, R12 = C1-8 org. group; and a, b = .gtoreq.1 integer. Thus, 4,4'-diaminodiphenyl ether 19, 1,3-bis(3-aminopropyl)tetramethyldisiloxane 1.2, pyromellitic anhydride 10.8, and 3,3',4,4'-benzophenonetetracarboxylic dianhydride 15 g were reacted at room temp. for 6 h to give a polyamic acid varnish, 3% 3-aminopropionitrile was added therein, applied on a copper-sputtered silicon wafer, a titanium-sputtered silicon wafer, and a gold-sputtered silicon wafer, and cured to give test pieces showing good adhesion between metal materials and a heat-resistant resin.

IT 119666-27-2

RL: CAT (Catalyst use); USES (Uses)

(photoacid generator; prepn. of heat-resistant resin precursor compns. for semiconductor devices)

RN 119666-27-2 CAPLUS

CN 2-Anthracenesulfonic acid, 9,10-diethoxy-, (4-nitrophenyl)methyl ester (9CI) (CA INDEX NAME)

L12 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2003:271685 CAPLUS

DOCUMENT NUMBER:

138:287414

TITLE:

Preparation of hydroquinone alkyl ethers

INVENTOR(S):

Kubo, Hideo; Yamaguchi, Katsuji; Shirai, Akihiro

PATENT ASSIGNEE(S):

Nippon Soda Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 11 pp.

SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
		/-		
JP 2003104926	A2	20030409	JP 2001-299629	20010928
PRIORITY APPLN. INFO.:			JP 2001-299629	20010928

OTHER SOURCE(S):

CASREACT 138:287414

Title compds., useful as sensitizers for photopolymn., etc. (no data), are prepd. by alkylation of hydroquinones by C.gtoreq.3 alkylating agents in the presence of bases and quaternary ammonium salts having C.gtoreq.5 substituents on N. Anthraquinone was alkylated by BuI in THF/H2O in the presence of trioctylmethylammonium chloride, Na2S2O4, and NaOH at 40-50.degree. for 5 h to give 85% 9,10-dibutoxyanthracene.

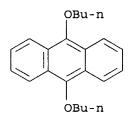
IT 76275-14-4P

> RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(prepn. of hydroquinone alkyl ethers from hydroquinones using quaternary ammonium salts)

RN 76275-14-4 CAPLUS

CN Anthracene, 9,10-dibutoxy- (9CI) (CA INDEX NAME)



CAPLUS COPYRIGHT 2006 ACS on STN L12 ANSWER 5 OF 9

ACCESSION NUMBER:

2003:271684 CAPLUS

DOCUMENT NUMBER:

138:287413

TITLE:

Preparation of anthracene diethers

INVENTOR(S):

Nakano, Hironori; Honda, Hiroyuki; Numata, Shigeaki

PATENT ASSIGNEE(S):

Kawasaki Kasei Chemicals, Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 7 pp. CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

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	2510						2004	0708		CA :	2002-	2510	270		2	0021	219
WO	2004	0567	34		A1		2004	0708		WO :	2002-	JP13.	314		2	0021	219
WO	2004	0567	34		Cl		2005	0804									
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		GM,	HR,	HU,	ID,	IL,	IN,	IS,	KE,	KG	, KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,
		LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX	, MZ,	NO,	NZ,	OM,	PH,	PL,	PT,
		RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	TJ	, TM,	TN,	TR,	TT,	TZ,	UA,	UG,
		US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	zw								
	RW:	GH,	GM,	KE,	LS,	MW,	ΜZ,	SD,	SL,	SZ	, TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	ΚZ,	MD,	RU,	TJ,	TM,	ΑT,	BE,	BG	, CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL	, PT,	SI,	SK,	TR,	BF,	ВJ,	CF,
		CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR	, NE,	SN,	TD,	TG			
AU	2002	3576	16		A1		2004	0714		AU :	2002-	3576	16		2	0021	219
EP	1574	493			A1		2005	0914		EP	2002-	8082	87		2	0021	219
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		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	$\mathtt{AL}$	, TR,	BG,	CZ,	EE,	SK		
US	2006	07972	21		A1		2006	0413		US .	2005-	5398	07		2	0050	620
PRIORIT	Y APP	LN.	INFO	. :							2001-						
										WO .	2002-	JP13	314	1	₩ 2	0021	219
OTHER S	OURCE	(S):			MAR	TAS	138:	2874	13								

GI

$$R^{5}m$$
  $R^{6}n$ 

AB Anthracene diethers I (R = alkyl, allyl, aryl, benzyl, hydroxyalkyl, alkoxyalkyl; R5, R6 = inert group; m, n = 0-4), useful as sensitizers for photocurable compns. (no data), are prepd. by reaction of 9,10-anthracenediols with etherifying agents in aq. media contg. alkalies and quaternary ammonium or phosphonium compds.

9,10-Anthracenediol Na salt was etherified with BuBr in H2O/MEK in the presence of Bu4NBr at 70.degree. for 4 h to give 90% 9,10-dibutoxyanthracene.

IT 68818-86-0P, 9,10-Diethoxyanthracene 76275-14-4P 479412-73-2P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(prepn. of anthracene diethers from anthracenediols using quaternary ammonium or phosphonium compds.)

RN 68818-86-0 CAPLUS

CN Anthracene, 9,10-diethoxy- (6CI, 9CI) (CA INDEX NAME)

I

RN 76275-14-4 CAPLUS

CN Anthracene, 9,10-dibutoxy- (9CI) (CA INDEX NAME)

RN 479412-73-2 CAPLUS

CN Anthracene, 9,10-dipropoxy- (9CI) (CA INDEX NAME)

L12 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2002:36602 CAPLUS 136:103469

DOCUMENT NUMBER: TITLE:

136:103469
Heat-resistant resin compositions useful for

semiconductor devices with good adhesion and low

Composition/ Not process

absorbance

INVENTOR(S):

Okuda, Ryoji; Fujiwara, Takenori; Tomikawa, Masao

PATENT ASSIGNEE(S):

Toray Industries, Inc., Japan Jpn. Kokai Tokkyo Koho, 17 pp.

SOURCE: Jpn. Kokai To CODEN: JKXXAF

DOCUMENT TYPE:

9

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
JP 2002012761	A2	20020115	JP 2001-112287		20010411
PRIORITY APPLN. INFO.:		/	JP 2000-129395	Α	20000428

The compns. useful for surface protective and insulative uses for semiconductor devices contain triazine and/or vinyl group-contg. compds. and [COR1(OH)p(CO2R3)nCONHR2/OH)q(CO2R4)oNH]m [R1, R2 = (2-8 valent) org. group contg. .gtoreq.2 C atoms; R3, R4 = H, alkali metal ion, ammonium ion, C1-20 org. group; m = 3-100,000; n = 0-2; p, q = 0-4; n + q >0]. Thus, cyanuric acid triallyl ester was mixed with a mixt.

contq. 4,4'-diaminodiphenyl ether-pyromellitic anhydride-3,3',4,4'benzophenonetetracarboxylic dianhydride copolymer, N, Ndimethylaminoethylmethacrylamide, N-phenylglycin, ethylene glycol dimethacrylate, and 3,3'-carbonylbis(7-diethylaminocoumalin), the resulting mixt. was applied on a glass substrate, dried, and cured to give a 1 .mu.m film showing absorbance 0.035 at 500 nm. 119666-27-2

RL: MOA (Modifier or additive use); USES (Uses) (photoacid generator; heat-resistant resin compns. useful for semiconductor devices with good adhesion and low absorbance)

RN 119666-27-2 CAPLUS

IT

2-Anthracenesulfonic acid, 9,10-diethoxy-, (4-nitrophenyl)methyl ester CN (9CI) (CA INDEX NAME)

L12 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2002:10872 CAPLUS

DOCUMENT NUMBER:

TITLE:

136:93561

Optical imaging device with flat display panels equipped with electrodes partially coated with

dielectric material of positive-working

light-sensitive polyimide

INVENTOR(S):

Okuda, Ryoji; Fujimori, Shigeo; Oka, Tetsuo; Tomikawa,

PATENT ASSIGNEE(S):

Toray Industries, Inc., Japan

SOURCE:

PCT Int. Appl., 52 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA:	FENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO	2002001922 W: KR, US	A1	20020103	WO 2001-JP5466	20010626
	*	CY, DE	E, DK, ES,	FI, FR, GB, GR, IE,	IT, LU, MC, NL,
JР	2002091343	A2	2002,0327	JP 2001-189396	20010622
JP	2002116715	A2	200⁄20419	JP 2001-189397	20010622
TW	525407	В	2,0030321	TW 2001-90115392	20010626
EΡ	1296540	Al	<i>2</i> 0030326	EP 2001-941258	20010626
	R: AT, BE, CH, IE, FI, CY,		, ES, FR,	GB, GR, IT, LI, LU,	NL, SE, MC, PT,
US	2002162998	Aľ	20021107	US 2002-69769	20020228
US	6696112	B2	20040224		
RIT	Y APPLN. INFO.:			JP 2000-194019	A 20000628
				WO 2001 TDE466	TT 20010020

PRIO WO 2001-JP5466 A display comprises a first electrode having an insulating layer in a AB manner such that a part of the first electrode is exposed, and a second

electrode disposed so as to be opposed to the first electrode having the insulating layer, wherein the the insulating layer comprises a pos. photosensitive polyimide with structural unit [-CO-R1(OH)p(COOR3)n-CO-NH- R2(OH)q(COOR4)o-NH-]m ( R1-2 = C.gtoreq.2 2-8 valent orgs.; R3-4 = H, alkali metal ion, ammonium ion, C1-20 orgs.; m = 3-100,000; n, o = 0-2 integer; p, q = 0-4 integer, p+q>0) and an agent generating an acid by a light. The optical imaging device has easily patterned polyimide insulating layer on the electrodes.

TT 119666-27-2

> RL: RCT (Reactant); RACT (Reactant or reagent) (photoresist compn. for dielec. coating on electrodes of optical imaging devices)

RN 119666-27-2 CAPLUS

2-Anthracenesulfonic acid, 9,10-diethoxy-, (4-nitrophenyl)methyl ester CN (CA INDEX NAME)

proces for making

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 9. RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

1990:581220 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 113:181220

An aqueous base developable novel deep-UV resist for TITLE:

krypton fluoride (Krf) excimer laser lithography Murata, Makoto; Takahashi, Toshihiko; Koshiba,

Mitsunobu; Kawamura, Shinichi; Yamaoka, Tsuguo

Electron. Res. Lab., Japan Synth. Rubber Co., Ltd., CORPORATE SOURCE:

Kawasaki, 215, Japan

Proceedings of SPIE-The International Society for SOURCE:

Optical Engineering (1990), 1262(Adv. Resist Technol.

Process. 7), 8-15

COMEN: PSISDG; ISSN: 0277-786X

DOCUMENT TYPE: **J**ournal English LANGUAGE:

A novel deep-UV resist of poly(p-trimethylsilyloxystyrene) and p-nitrobenzyl 9-10-diethoxyanthracene-2-sulfonate is capable of resolving 0.3 .mu. lines and spaces with steep sidewalls at 0.8 .mu. thickness by a KrF excimer/laser stepper. Wet development in a conventional tetramethy/ammonium hydroxide developer caused no crit. thickness loss in the unexposed area. Owing to its O plasma durability, this resist works as a top layer of a bilayer resist.

IT 119666-27-2

AUTHOR (S):

RL: USES (Uses)

(excimer laser submicron lithog. deep-UV photoresist contg., aq. base developable)

RN 119666-27-2 CAPLUS

2-Anthracenesulfonic acid, 9,10-diethoxy-, (4-nitrophenyl)methyl ester CN(9CI) (CA INDEX NAME)

IT 123131-61-3P, 9,10-Diethoxyanthracene-2-sulfonic acid

RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (formation and reaction of, in deep-UV exposed submicron lithog. photoresist)

RN 123131-61-3 CAPLUS

CN 2-Anthracenesulfonic acid, 9,10-diethoxy- (9CI) (CA INDEX NAME)

IT 129995-19-3, 9,10-Diethoxy-2-p-nitrobenzylanthracene

RL: USES (Uses)

(in deep-UV exposed submicron lithog. photoresist)

RN 129995-19-3 CAPLUS

CN Anthracene, 9,10-diethoxy-2-[(4-nitrophenyl)methyl]- (9CI) (CA INDEX NAME)

Cished composition, but process for making

L12 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1987:59428 CAPLUS

DOCUMENT NUMBER:

106:59428

TITLE:

Liquid crystal compositions

INVENTOR(S):

Horimoto, Hikari; Mizutani, Yukio; Ogata, Takayuki

PATENT ASSIGNEE(S): SOURCE:

Tokuyama Soda Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:
FAMILY ACC. NUM. COUNT:

rr· 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61136584	A2	19860624	JP 1984-257349	19841207
JP 03080833	B4	19911226		

PRIORITY APPLN. INFO.:

JP 1984-257349

19841207

AB The claimed liq. crystal-like compns. contain (1) a quaternary ammonium compd. having .gtoreq.2 linear hydrophobic groups or .gtoreq.1 hydrophobic group contg. stiff part within the chain and (2) a phosphoric group-contg. compd. having .gtoreq.2 linear hydrophobic groups. The liq. crystal-like compns. give membranes which show good water resistance and liq. crystal characteristics. The compns. are useful in prepg. synthetic biomembranes, display devices, and membranes for various sensors. Thus, a di(n-octadecyl)dimethylammonium bromide soln. and a di(n-dodecyl)monohydrogen phosphate soln. were mixed to give white ppt. which showed small soly. in water and showed liq. crystal phase at 56-115.

IT 106347-17-5

RL: PRP (Properties)

(prepns. of, as liq. crystal compds.)

RN 106347-17-5 CAPLUS

CN 1-Decanaminium, 10-[[10-(dodecyloxy)-9-anthracenyl]oxy]-N,N,N-trimethyl-, dioctadecyl phosphate (9CI) (CA INDEX NAME)

CM 1

CRN 106347-16-4 CMF C39 H62 N O2

CM 2

CRN 84841-00-9 CMF C36 H74 O4 P

Me- 
$$(CH_2)_{17}$$
-O-P-O- $(CH_2)_{17}$ -Me

=> save

ENTER L#, L# RANGE, ALL, OR (END):yc10539807/a
YC10539807/A IS NOT A VALID L#, L# RANGE, OR ALL
Enter a valid L-number or L-number range for the items to be saved or
ALL to SAVE all session queries as an L-number list. To see all
L-numbers defined in this session, enter END. Then enter DISPLAY
HISTORY at an arrow prompt (=>).
ENTER L#, L# RANGE, ALL, OR (END):14
ENTER NAME OR (END):yc10539807/a
ANSWER SET L4 HAS BEEN SAVED AS 'YC10539807/A'

HISTORY at an arrow prompt (=>). ENTER L#, L# RANGE, ALL, OR (END):14 ENTER NAME OR (END):yc10539807/a ANSWER SET L4 HAS BEEN SAVED AS 'YC10539807/A'

=> s 14 and phase-transfer agent

1690902 PHASE

353345 PHASES

1839674 PHASE

(PHASE OR PHASES)

781065 TRANSFER

25566 TRANSFERS

793479 TRANSFER

(TRANSFER OR TRANSFERS)

793909 AGENT

1154928 AGENTS

1624410 AGENT

(AGENT OR AGENTS)

659 PHASE-TRANSFER AGENT

(PHASE (W) TRANSFER (W) AGENT)

0 L4 AND PHASE-TRANSFER AGENT L13

=> s 14 and phase transfer

1690902 PHASE

353345 PHASES

1839674 PHASE

(PHASE OR PHASES)

781065 TRANSFER

25566 TRANSFERS

793479 TRANSFER

(TRANSFER OR TRANSFERS)

14182 PHASE TRANSFER

(PHASE (W) TRANSFER)

L14 1 L4 AND PHASE TRANSFER

=> d ibib abs hitstr tot

L14 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:271685 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER:

138:287414

TITLE:

Preparation of hydroquinone alkyl ethers

INVENTOR(S):

Kubo, Hideo; Yamaguchi, Katsuji; Shirai, Akihiro

PATENT ASSIGNEE(S):

Nippon Soda Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 11 pp.

SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003104926	A2	20030409	JP 2001-299629	20010928
PRIORITY APPLN. INFO.:			JP 2001-299629	20010928

OTHER SOURCE(S): CASREACT 138:287414 Title compds., useful as sensitizers for photopolymn., etc. (no data), are prepd. by alkylation of hydroquinones by C.gtoreq.3 alkylating agents in the presence of bases and quaternary ammonium salts having C.gtoreq.5 substituents

on N. Anthraquinone was alkylated by BuI in THF/H2O in the presence of

trioctylmethylammonium chloride, Na2S2O4, and NaOH at 40-50.degree. for 5 h to give 85% 9,10-dibutoxyanthracene.

IT 76275-14-4P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(prepn. of hydroquinone alkyl ethers from hydroquinones using quaternary ammonium salts)

RN 76275-14-4 CAPLUS

CN Anthracene, 9,10-dibutoxy- (9CI) (CA INDEX NAME)

=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	139.15	306.74
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-13.50	-13.50

STN INTERNATIONAL LOGOFF AT 08:43:10 ON 14 AUG 2006